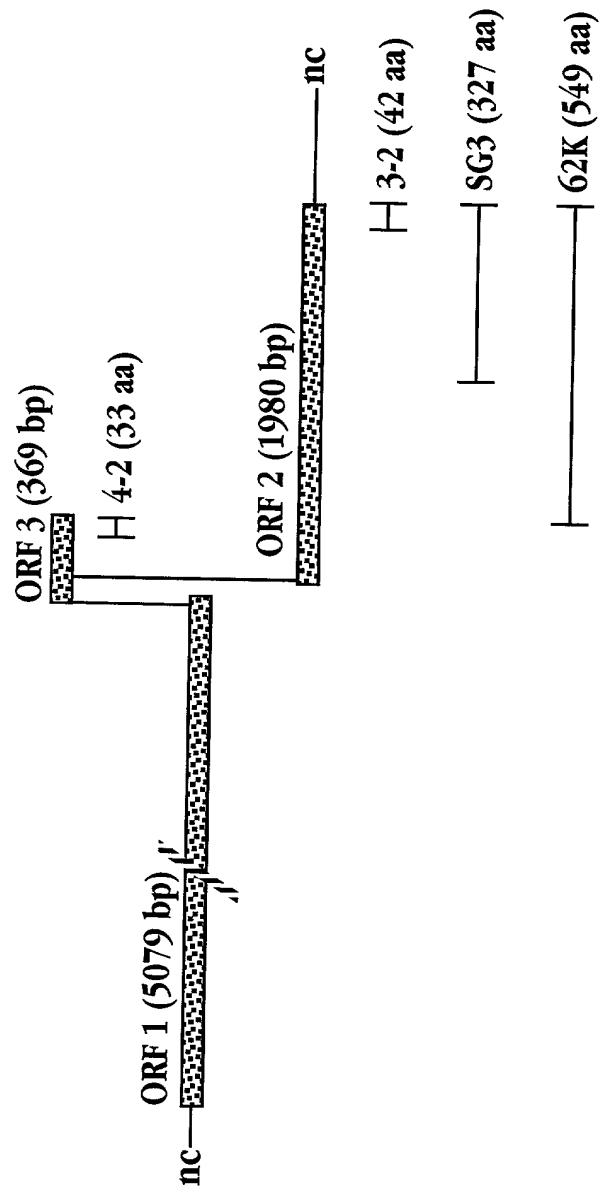


.....



**Fig. 1**

	I-ORF3-->						I-ORF2-->						
	5110v	5120v	5130v	5140v	5150v	5160v		5170v	5180v	5190v	5200v	5210v	5220v
-BURMA	TGGAAATGAATAAACATGTCTTTGCTGCGCCATGGGTCGCGACCATGCGCCCTCGGCCT							GAATGAATAAACATGT TTTGCTGCGCCATGGGTCGCG ACCATGCGCCCT GGCCT					
-MEXICO	CTGAATGAATAAACATGTGGTTTGCTGCGCCATGGGTCGCCACCATGCGCCCTAGGCCT												
	5230v	5240v	5250v	5260v	5270v	5280v		5290v	5300v	5310v	5320v	5330v	5340v
-BURMA	TCTGGCCGCCGTCGTGGGCCGGCAGCGGGGTTCCGGCGGTGGTTCTGGGTGACCGG							TCTGGCCGCCGTCGTGGGCCGGCAGCGGGGTTCCGGCGGTGGTTCTGGGTGACCGG					
-MEXICO	TCTGGCCGCCGTCGTGGGCCGGCAGCGGGGTTCCGGCGGTGGTTCTGGGTGACCGG												
	5350v	5360v	5370v	5380v	5390v	5400v		5410v	5420v	5430v	5440v	5450v	5460v
-BURMA	GTCACCGCTGCCGCCGGGCTGGACCTCGTGTTCGCAACCCCTATTCATCCAACCAACCCCTTCGCCCCCGAT							GCTTGGCGTGTGACCAAGGCCCAGCGCCCCGGCTGGCTCACGTCTAGACCTTACACAGCT					
-MEXICO	GT CCGCTGCG CGGGG CTGGACCTCG TTGGCCAACC GCCCG CCACG GGCTCC							CTTGGCG GA CAGGCCAGCGCCCC CG TGCTC CGTC GACCT CCACAGC					
	GTTGCCGCTGCGTCCGGGTCTGGACCTCGCCCTCGCCAACCAGCCCGGCCACTGGCTCC							ACTTGGCGAGATCAGGCCAGCGCCCCCTCCGCTGCCCTCCGACCTGCCACAGCC					
	<b>I-406.4-2--&gt;</b>												
	5470v	5480v	5490v	5500v	5510v	5520v		5530v	5540v	5550v	5560v	5570v	5580v
-BURMA	GGGGCCGCGCCGCTAACCGCGGTGCTCCGGCCATGACACCCCGCCAGTGCTGATGTC							GACTCCCCGGCGCCATCTGGCCGGCAGTATAACCTATCAACATCTCCCCCTACCTCT					
-MEXICO	GGGG CCG CGCT AC GC GT GC CC GCCC ATGAC ACC C CC GT CC GA GT							GA TC CGCG GC AT T CGCG CAGTATAA T TC AC TC CCCCT AC TC					
	GGGGCTGCGCGCTGACGGCTGGCCCTGCCATGACACCTCACCCGTCCCGACGTT							GATTCTCGCGGTGCAATTCTACGCCGCACTGATAATTGTCTACTTACCCCTGACATCC					
	5590v	5600v	5610v	5620v	5630v	5640v		5590v	5600v	5610v	5620v	5630v	5640v
-BURMA	TCCGTGGCCACCGGCACTAACCTGGTTCTTATGCCGCCCTCTAGTCCGCTTTACCC							TC GTGGCC C GGC ACTAA T GT CT TATGC GCCC C TTA TCCGC T T CC					
-MEXICO	TC TGTGGCCTCTGGCACTAACCTGGTTCTAGTCCGCTATGCAGCCCCCTTAATCCGCCCTGCCG												

**Fig. 2A**

	5650v	5660v	5670v	5680v	5690v	5700v
-BURMA	CTTCAGGACGGCACCAATACCCATATAATGGCCACGGAAGCTTCTAATTATGCCAGTAC					
-MEXICO	CT CAGGACGG AC AATAC CA AT ATGGCCAC GA GC TC AATTATGC CAGTAC					
	5710v	5720v	5730v	5740v	5750v	5760v
-BURMA	CGGGTTGCCCGTGCCACAATCCGTTACCGCCCGCTGGTCCCCAATGCTGTGGCGGTTAC					
-MEXICO	CGGGTTGCCCG GC AC ATCCGTTACCG CC CT GT CC AATGC GT GG GG TA					
	5770v	5780v	5790v	5800v	5810v	5820v
-BURMA	GCCATCTCCATCTCATTCTGGCCACAGACCACCAACCCGACGTCCGTTGATAATGAAT					
-MEXICO	GC AT TCCAT TC TTCTGGCC CA AC ACCAC ACCCC AC TC GTTGA ATGAAT					
	5830v	5840v	5850v	5860v	5870v	5880v
-BURMA	TCAATAACCTCGACGGATGTCGTATTTAGTCAGCCCGCATAGCCTCTGAGCTTGTG					
-MEXICO	TC AT AC TC AC GATGT G ATT T GT CA CC GGCATAGC TCTGA T GT					
	5890v	5900v	5910v	5920v	5930v	5940v
-BURMA	ATCCAAGT GAGCGCCTACACTATCGTAACCAAGGCTGGCGTCCGTCGAGACCTCTGGG					
-MEXICO	ATCCAAG GAGCGCCT CACTA CG AA CAAGG TGGCGTC GT GAGAC TCTGG					
	5950v	5960v	5970v	5980v	5990v	6000v
-BURMA	GTGGCTGAGGAGGAGGAGGCTACCTCTGGCTTATGCTTGCATACATGGCTCACTCGTA					
-MEXICO	GT GTGAGGAGGA GC ACCTC GGTCTGT ATG T TGCATACATGGCTC C GT					
	6010v	6020v	6030v	6040v	6050v	6060v
-BURMA	AAITCCTATACTAATACACCCTATACCGGTGCCCTCGGGCTGGACTTTGCCCTTGAG					
-MEXICO	AA TCCTATAC AATAC CC TATACCGGTGCCCT GG T TGGACTTTGCC T GAG					
	6070v	6080v	6090v	6100v	6110v	6120v
-BURMA	CTTGAGTTTCGCAACCTAACCCCGTAACACCAATACGGGGTCTCCGTTATTCCAGC					
-MEXICO	CTTGAGTTTCGCAA CT ACC CC GTAACACCAATAC CG GT TCCCGTTA TCCAGC					
	6130v	6140v	6150v	6160v	6170v	6180v
-BURMA	ACTGCTCGCCACCGCCTTCGTCGGTGGGACTGCCGAGCTCACCACCAACGGCT					
-MEXICO	ACTGCTCG CAC C CG G G GACGGGACTGC GAGCT ACCAC AC GC					
	ACTGCTCGTCACTCCGGCCGAGGGGCC---GACGGGACTCGGGAGCTGACCACAACTGCA					

**Fig. 2B**

	6190v	6200v	6210v	6220v	6230v	6240v
-BURMA	GCTACCCGTTTATGAAGGACCTCTATTAACTAGTACTAATGGTGTGGTAGAGATCGGC					
-MEXICO	GC ACC G TT ATGAA GA CTC A TTTAC G TAATGG GT GGTGA TCGGC					
	6250v	6260v	6270v	6280v	6290v	6300v
-BURMA	CGCGGGATAGCCTCACCCCTGTTAACCTTGCTGACACTCTGCTTGGCGGCCCTGCCGACA					
-MEXICO	CGCGGGATAGC CT AC T AACCTTGCTGACAC CT CT GGCGG CT CGACA					
	6310v	6320v	6330v	6340v	6350v	6360v
-BURMA	GAATTGATTTCGTCGGCTGGTGGCCAGCTGTTACTCCCGTCCCGTTGCTCAGCCAAT					
-MEXICO	GAATT ATTTCGTCGGCTGG CA CTGTT TA TCCCG CC GTTGTCTCAGCCAAT					
	6370v	6380v	6390v	6400v	6410v	6420v
-BURMA	GGCGAGCCGACTGTTAAGTTGTATACATCTGTAGAGAAATGCTCAGCAGGATAAGGGTATT					
-MEXICO	GGCGAGCC AC GT AAG T TATACATC GT GAGAATGCTCAGCAGGATAAGGGT TT					
	6430v	6440v	6450v	6460v	6470v	6480v
-BURMA	GCAATCCCCCATGACATTCGACCTCGGAGAATCTCGTGTGGTTATTCAAGGATTATGATAAC					
-MEXICO	GC ATCCC CA GA AT GA CT GG GA TC CGTGTGGT ATTCAAGGATTATGAAAC					
	6490v	6500v	6510v	6520v	6530v	6540v
-BURMA	CAACATGAACAAGATCGGCCGACGCCCTCTCCAGCCCCATCGGCCCTTCTCTGTCCTT					
-MEXICO	CA CATGA CA GATCGGCC AC CC TC CC GC CCATC CG CCTTT TCTGT CT					
	6550v	6560v	6570v	6580v	6590v	6600v
-BURMA	CGAGCTAATGATGTGCTTGGCTCTCTCACCGCTGGAGTATGACCAGTCCACTTAT					
-MEXICO	CGAGC AATGATGT CTGGCT TC CTCAC GC GCCGAGTATGACCAGTCCACTTA					
	6610v	6620v	6630v	6640v	6650v	6660v
-BURMA	GGCTCTCGACTGGCCAGTTATGTTCTGACTCTGTGACCTGGTTAATGTGTGCGACC					
-MEXICO	GG TC TC ACTGGCCC GTTAT T TC GAC GTGAC TTGGT AATGTGTGCGAC					
	6670v	6680v	6690v	6700v	6710v	6720v
-BURMA	GGCGCGCAGGCCGTGGCCGGTCGCTCGAATTGGACCAAGGTCACACTTGACGGTCGCC					
-MEXICO	GGCGCGCAGGCCGT GCGG TGCT GA TGG CCAA GTCAC CT GACGG CG CCC					
	6730v	6740v	6750v	6760v	6770v	6780v
-BURMA	CTCTCCACCATCCAGCAGTACTCGAAGACCTCTTGTGCTGCCGCTCCGGTAAGCTC					
-MEXICO	CTC C AC T AGCA TA TC AAGAC TTCTTGT CT CC CT CG GG AAGCTC					

**Fig. 2C**

	6790v	6800v	6810v	6820v	6830v	6840v
-BURMA	TCITTCGGGAGGCAGGCACAACTAAAGCCGGTACCCCTATAATTATAACACCACTGCT					
-MEXICO	TC TT TGGGAGGC GGCAAC AC AAAGC GG TA CCTTATAATTATAA AC ACTGCT					
	6850v	6860v	6870v	6880v	6890v	6900v
-BURMA	AGCGACCAACTGCTTGTCGAGAATGCCGCCGGCACCGGGTCGCTATTCCACITACACC					
-MEXICO	AG GACCA T CT T GA AATGC GCCGG CA CGGGTCGC ATTTC AC TA ACC					
	6910v	6920v	6930v	6940v	6950v	6960v
-BURMA	ACTAGCCTGGGTGCTGGTCCCCTCCTCCATTCTGCGGTGCCGTTAGCCCCCACTCT					
-MEXICO	AC AG CT GG GC GGTCC GTC CCAATTCTGCGG GC GTTT GC CC C CTC					
	ACCAGGCTGGGGCCGGTCGGCTGCCATTCTGGCTCCACGCTCC					
	I-406.3-2-->					
	6970v	6980v	6990v	7000v	7010v	7020v
-BURMA	GCCCTAGCATTCGCTTGAGGATACCTTGACTACCCCTGCCGCCACATTTGATGAT					
-MEXICO	GC CT GC TGCT GAGGATAC TT GA TA CC G CG GC CA AC TTGATGA					
	7030v	7040v	7050v	7060v	7070v	7080v
-BURMA	TTCTGCCCAAGTGCCGCCCTTGCCCTCAGGGCTGCGCTTCCAGTCTACTGTCGCT					
-MEXICO	TTCTGCCCAAGTGCCGCCCTTGCCCTCAGGGCTGCGCTTCCAGTCTACTGTCGCT					
	<-SG3-I <-406.3-2-I					
	7090v	7100v	7110v	7120v	7130v	7140v
-BURMA	GAGCTTCAGCGCCTAACATGAAGGTGGTAAAACCTCGGGAGITGTAGTTTATTTGCTTG					
-MEXICO	GAGCTTCAGCGCCTAACATGAAGGTGGTAAAACCTCGGGAGITGTAGTTTATTTGCTTG					
	7150v	7160v	7170v	7180v	7190v	
-BURMA	TGCCCCCCCCTCTTCTGTTGC-----TTATTTCTCATTTCTGCGGTCCCGCGCTCCCC					
-MEXICO	TGCCCCACCTACTATATCTGCGATTTCTTATTTCTCGGTCCCCGCGCTCCCC					
	<-I ORF2			<-I trpE-C2		
	v 7195					
-BURMA	TGA					
-MEXICO	TGA					

**Fig. 2D**

	10	20	30	40	50	60
HEV (B)	MNNMSFAAPMGSRPCALGLFCCCSSCFCLCCPRHRPVSRLAAVGGAAAVPAVVSGVTGL	X:::: ::::::::::::::::::::: ::::::::::::::::::::: :::::::::::::::::::::				
HEV (M)	MNNMWFAAPMGSPPCALGLFCCCSSCFCLCCPRHRPVSRLAAVGGAAAVPAVVSGVTGL					
	10	20	30	40	50	60
406.4-2						
	70	80	90	100	110	120
HEV (B)	ILSPSQSPIFIQPTPSPPMSPLRPGLDLVFANPPDHSAPLGVTRPSAPPLPHVVVDLPQLG	::::::::::: :: . ::::::::::::::: .:: : ::::: .::: ::::: .::: :				
HEV (M)	ILSPSQSPIFIQPTPLPQTLPLRPGLDLAFANQPGHLAPLGEIRPSAPPLPPADLPQPG					
	70	80	90	100	110	120
HEV (B)	PRRZ					
	::X					
HEV (M)	LRRZ					

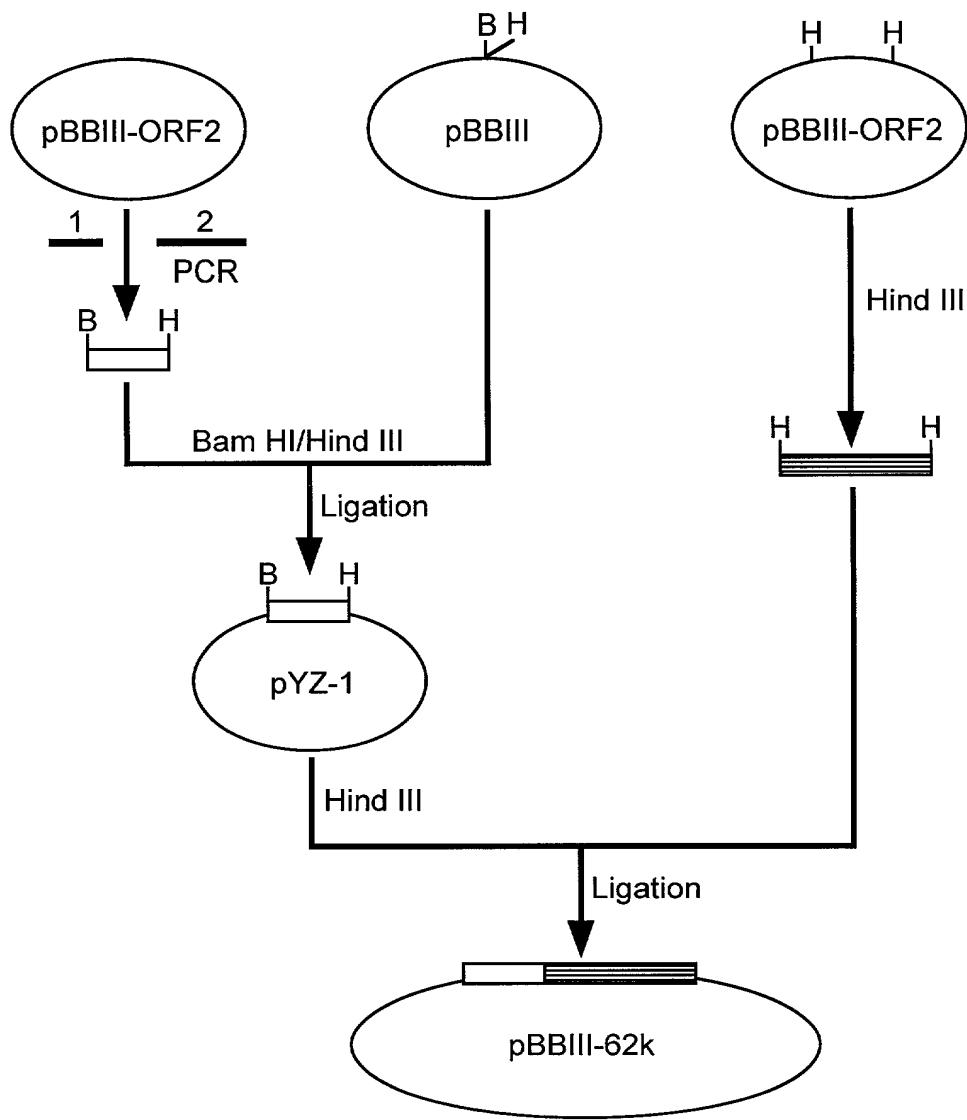
**Fig. 3**

	10	20	30	40	50	60
HEV (B)	MRPRPILLIILMFLPMLPAPPPGQPSGRRGRSGGGFWGDRVDSQPFAIPYIHPTN X:::::::::::::::::::					
HEV (M)	MRPRPILLIILFLLPMLPAPPTGQPSGRRGRSGGTGGGFWGDRVDSQPFAIPYIHPTN 10 20 30 40 50 60					
						62K
HEV (B)	PFAPDVTAAGAGPRVRQPARPLGSAWRDQAQRPAVASRRPTTAGAAPLTAVAPAHDT ::::::					
HEV (M)	PFAPDVAAASGSGPRLRQPARPLGSTWRDQAQRPSAASRRPATAGAAALTAVAPAHDT 70 80 90 100 110 120					
	130	140	150	160	170	180
HEV (B)	PVPDVDSRGAILRRQYNLSTSPLTSSVATGTINLVLYAAPLSPLLPLQDGINTHIMATEAS ::::::					
HEV (M)	PVPDVDSRGAILRRQYNLSTSPLTSSVASGTINLVLYAAPLNPLPLQDGINTHIMATEAS 130 140 150 160 170 180					
						C-2
	190	200	210	220	230	240
HEV (B)	NYAQYRVARATIRYRPLVPNAVGGYAIISIFWPQTITPTSVDMNSITSTDVRILVQPGI ::::::					
HEV (M)	NYAQYRVARATIRYRPLVPNAVGGYAIISIFWPQTITPTSVDMNSITSTDVRILVQPGI 190 200 210 220 230 240					
	250	260	270	280	290	300
HEV (B)	ASELVIPSERLHYRNQGWRSVETSGVAEEATSGLVMLCIHGSLVNSYTNTPYTGALGLL ::::::					
HEV (M)	ASELVIPSERLHYRNQGWRSVETSGVAEEATSGLVMLCIHGSPVNNSYTNTPYTGALGLL 250 260 270 280 290 300					
						SG3
	310	320	330	340	350	360
HEV (B)	DFALELEFRNLTPGNINTRVSRYSSTARHRLRRGADGTAELTTAACRFMKDLYFTSTNG ::::::					
HEV (M)	DFALELEFRNLTTCTNTRVSRYSSTARHS-ARGADGTAELTTAACRFMKDLHFTGLNG 310 320 330 340 350					
	370	380	390	400	410	420
HEV (B)	VGEIGRGIALTLFNLAIDLGLPTELISSAGGQLFYSRPVVSANGEPTVKLYTSVNAQ ::::::					
HEV (M)	VGEVGRGIALTLINLAIDLGLPTELISSAGGQLFYSRPVVSANGEPTVKLYTSVNAQ 360 370 380 390 400 410					
	430	440	450	460	470	480
HEV (B)	QDKGIAIPHDIDLGESRVVIQDYDNQHEQDRPTPSPAPSRRFSVLRANDVLWLSLTAAEY ::::::					
HEV (M)	QDKGVAIPHDIDLGDSRVVIQDYDNQHEQDRPTPSPAPSRRFSVLRANDVLWLSLTAAEY 420 430 440 450 460 470					

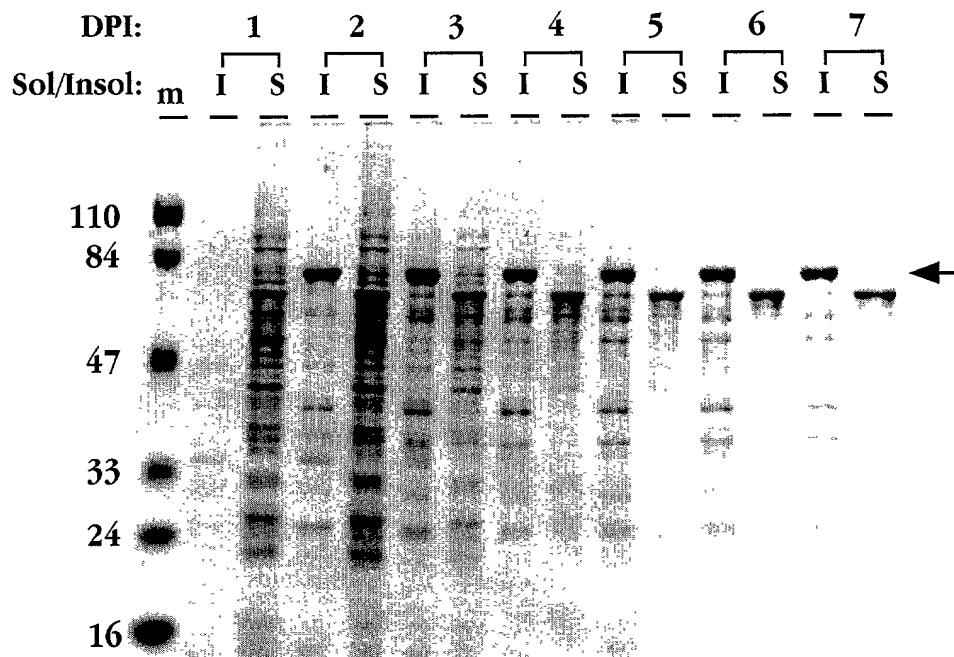
**Fig. 4A**

	490	500	510	520	530	540
HEV (B)	DQSTYGSSTGPVYVSDSVTLVNVATGAQAVARSLDWTKVTLDGRPLSTIQQYSKTFVLP	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
HEV (M)	DQSTYGSSTGPVYISDSVTLVNVATGAQAVARSLDWSKVTLGDRPLPTVEQYSKTFVLP	.....	.....	.....	.....	.....
	480	490	500	510	520	530
	550	560	570	580	590	600
HEV (B)	LRGKLSFWEAGTTKAGYPYNNTASDQLLVENAAGHRVAISTYTSILGAGPVSISAVAV	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
HEV (M)	LRGKLSFWEAGTTKAGYPYNNTASDQILIENAAGHRVAISTYTRILGAGPVAISAAAV	.....	.....	.....	.....	.....
	540	550	560	570	580	590
	406.3-2					
	610	620	630	640	650	
HEV (B)	LAPHSALALLEDTLDYPARAHTFDDFCPECRPLGLQGCAFQSTVAELQRLKMGKTR	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....
HEV (M)	LAPRALALLEDTFDYPGRAHTFDDFCPECRALGLQGCAFQSTVAELQRLKVKVGKTR	.....	.....	.....	.....	.....
	600	610	620	630	640	650
HEV (B)	ELZ					
	...					
HEV (M)	ELZ					

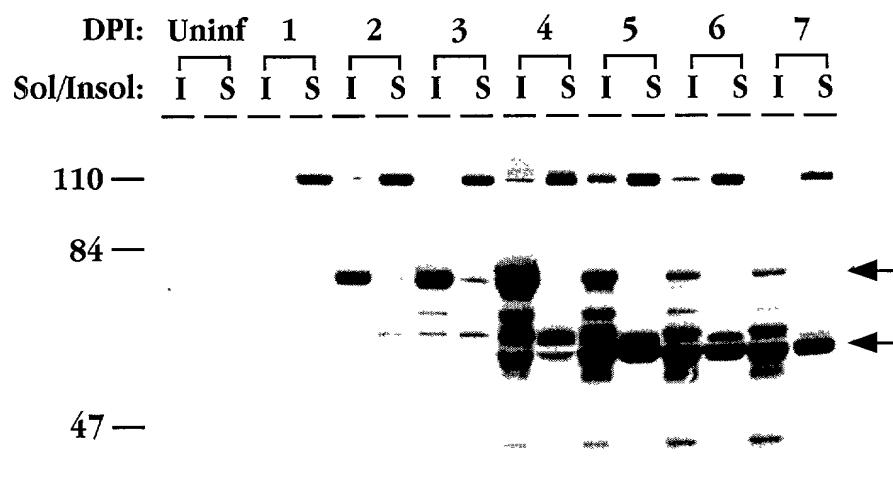
**Fig. 4B**



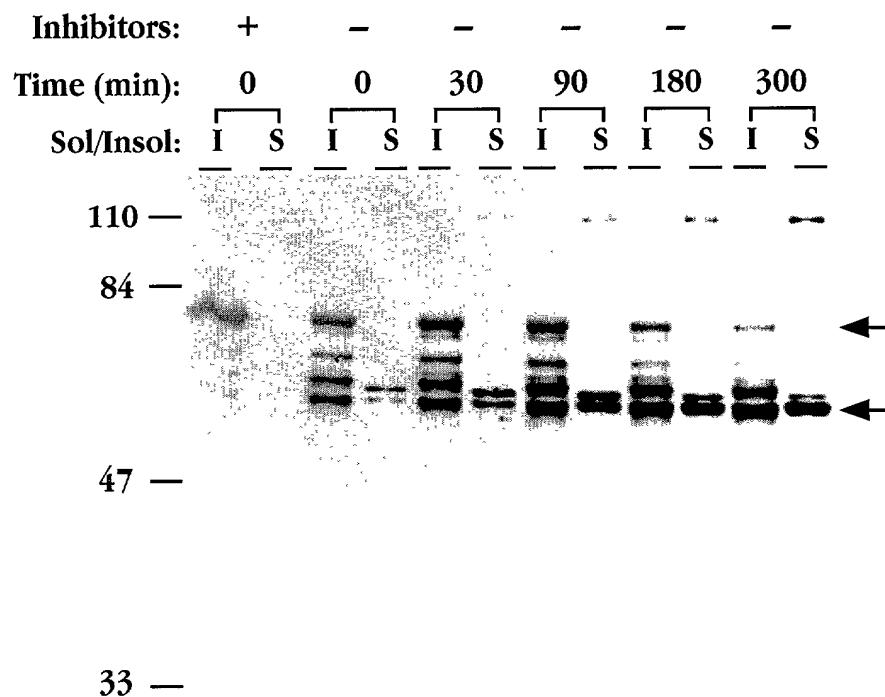
**Fig. 5**



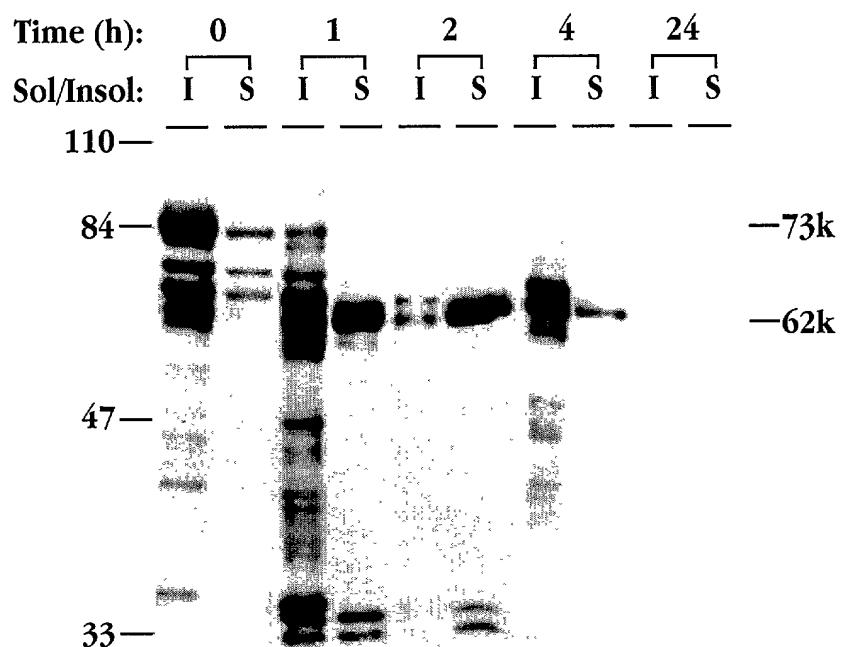
**Fig. 6A**



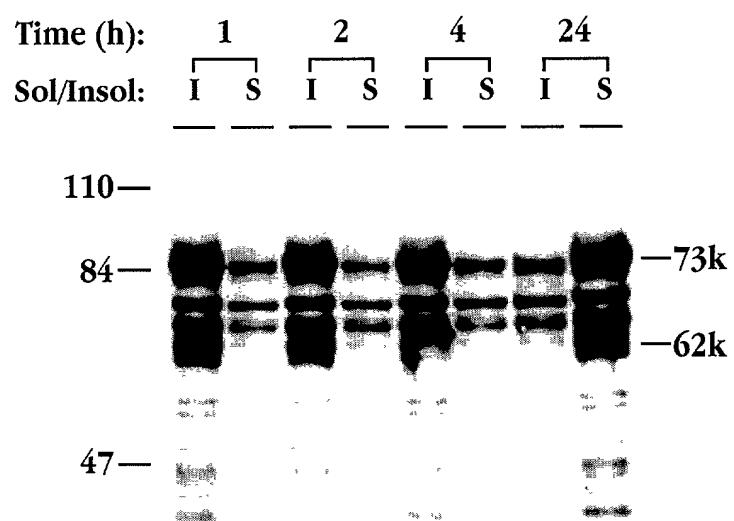
**Fig. 6B**



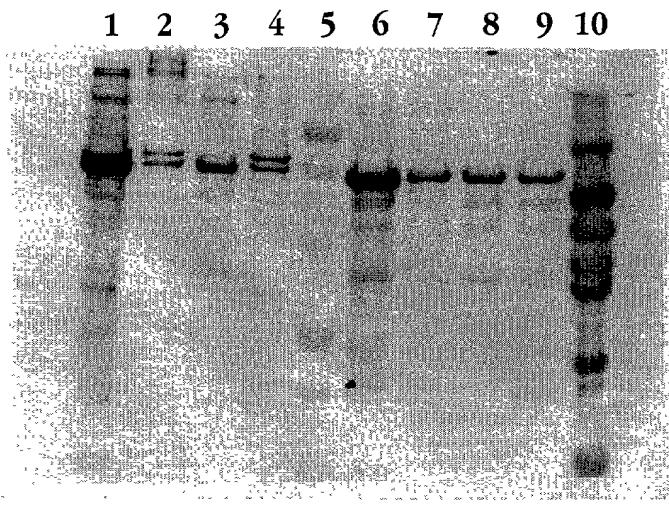
**Fig. 7**



**Fig. 8A**



**Fig. 8B**

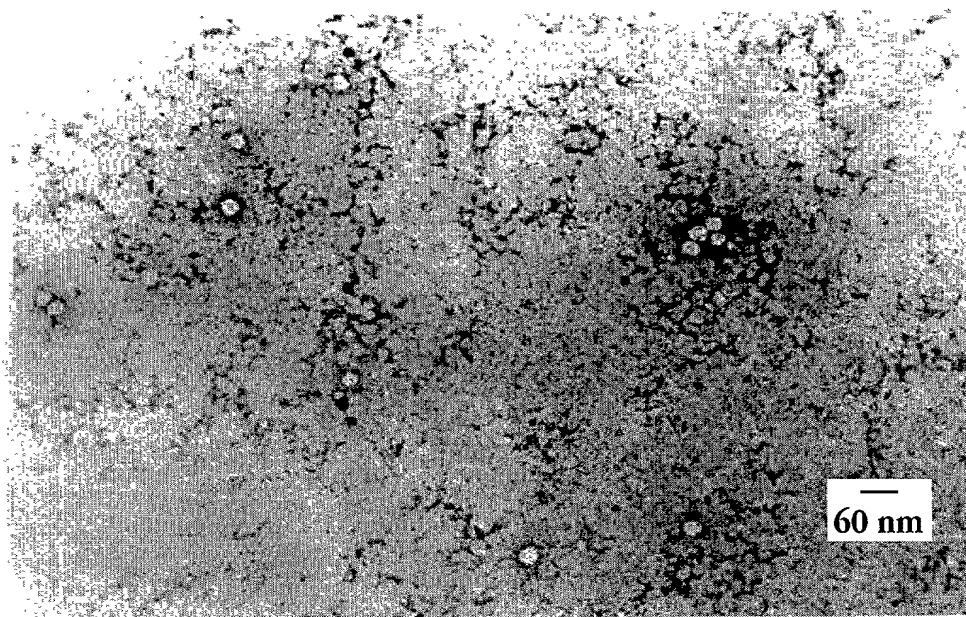


**Fig. 9**

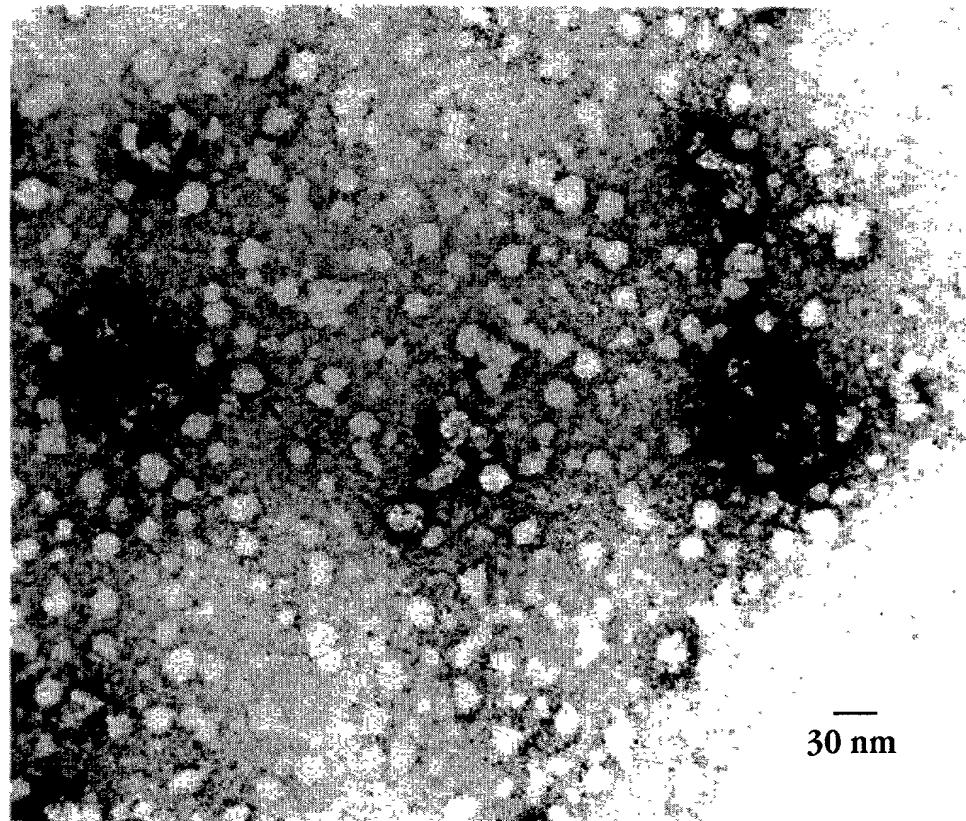


**SDS-PAGE**

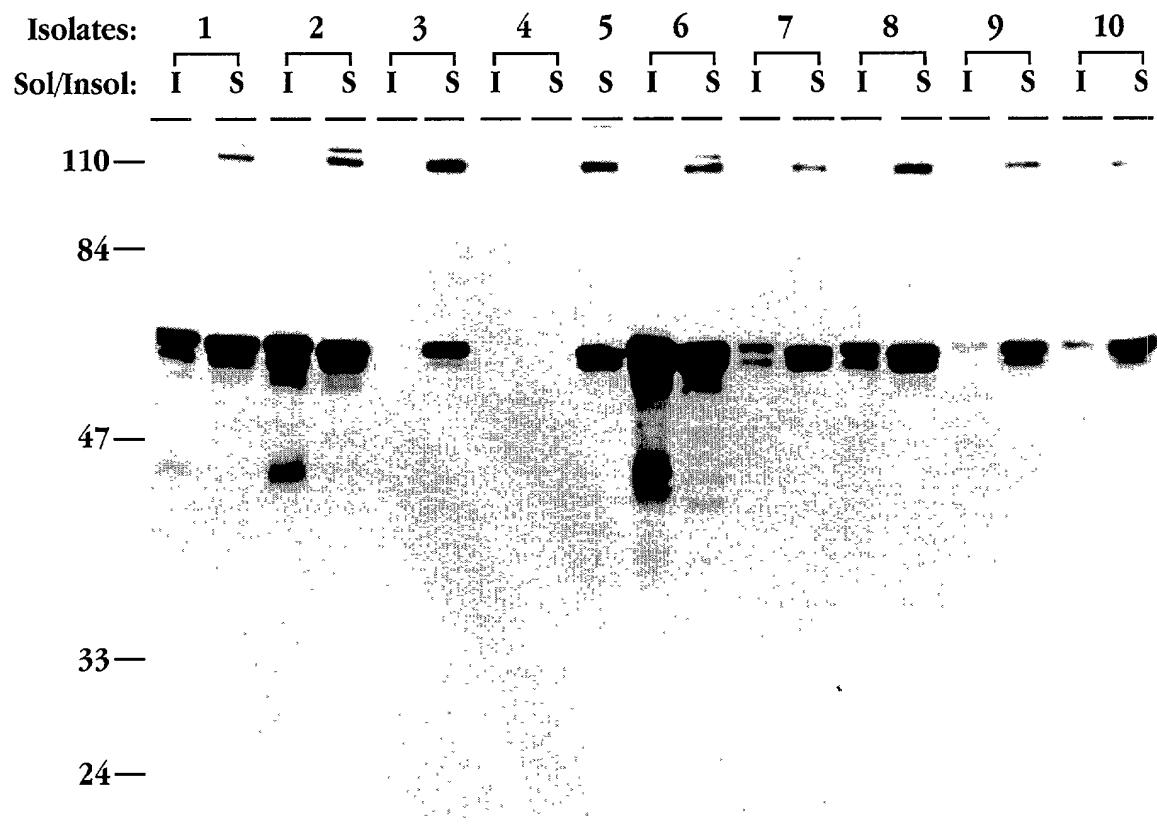
**Fig. 10**



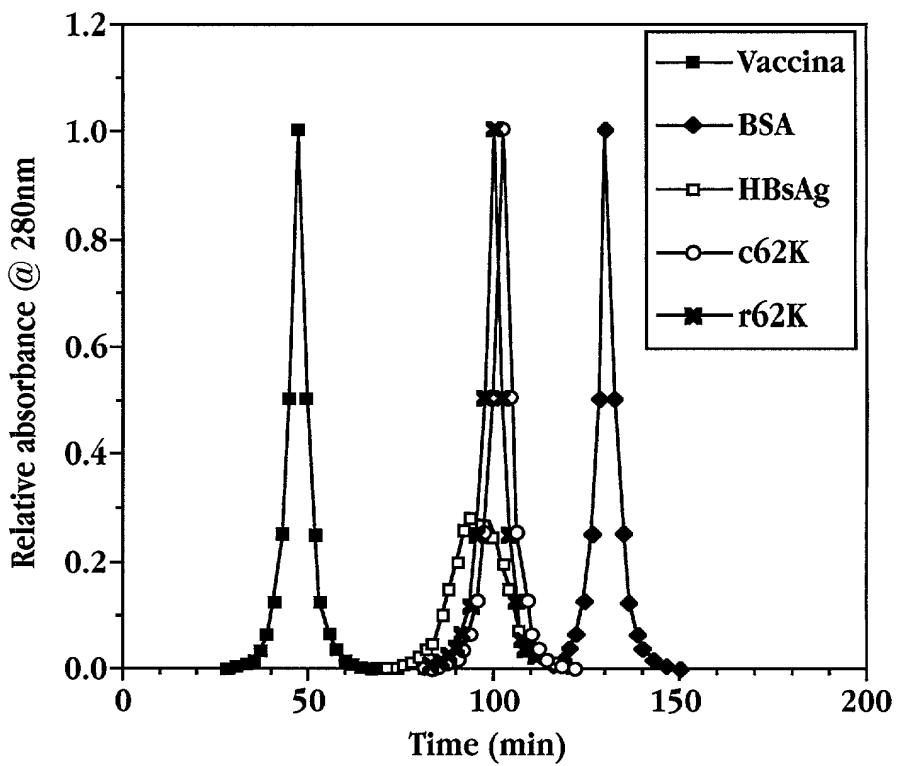
**Fig. 11A**



**Fig. 11B**



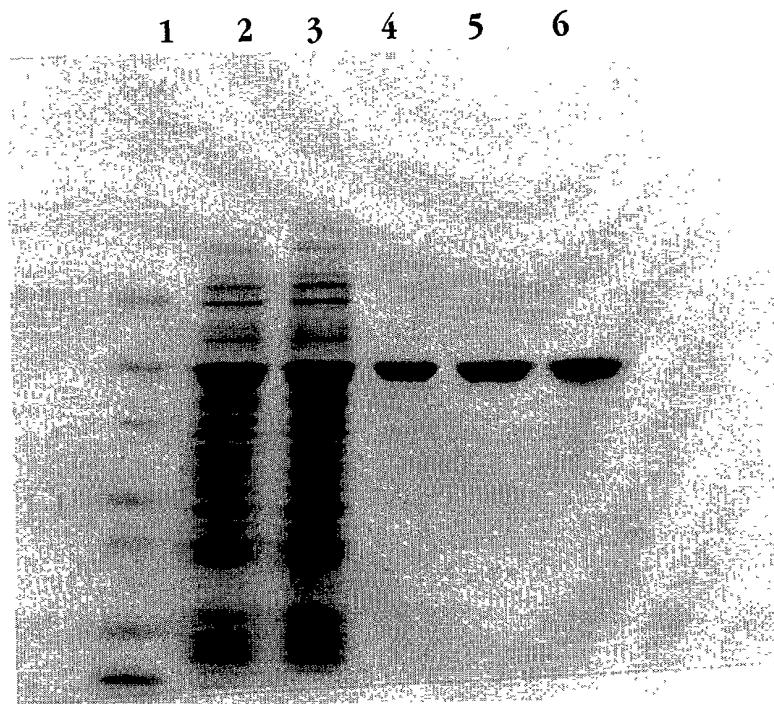
**Fig. 12**



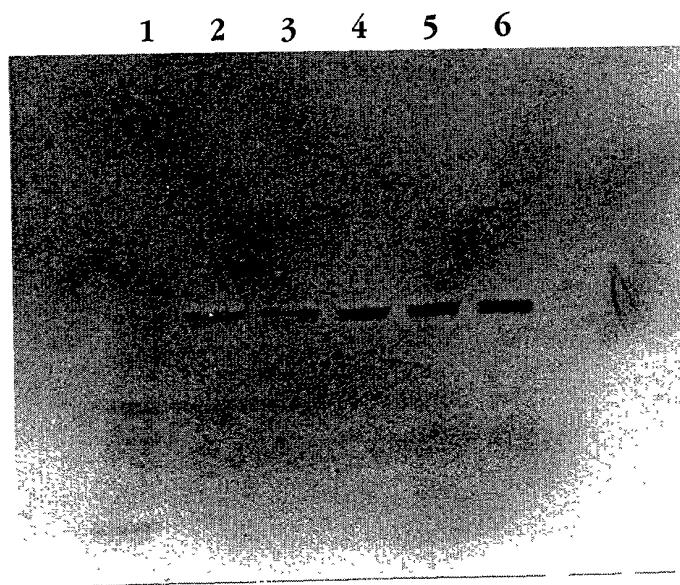
**Fig. 13**

MEXICAN (SEQ ID NO:18)	ANQPGHLAPLGEIRPSAPPLPPVADLPQPGLRR	10	20	30
BURMA (SEQ ID NO:17)	ANPPDHSAPLGVTRPSAPPLPHVVDLPQLGPRR	10	20	30

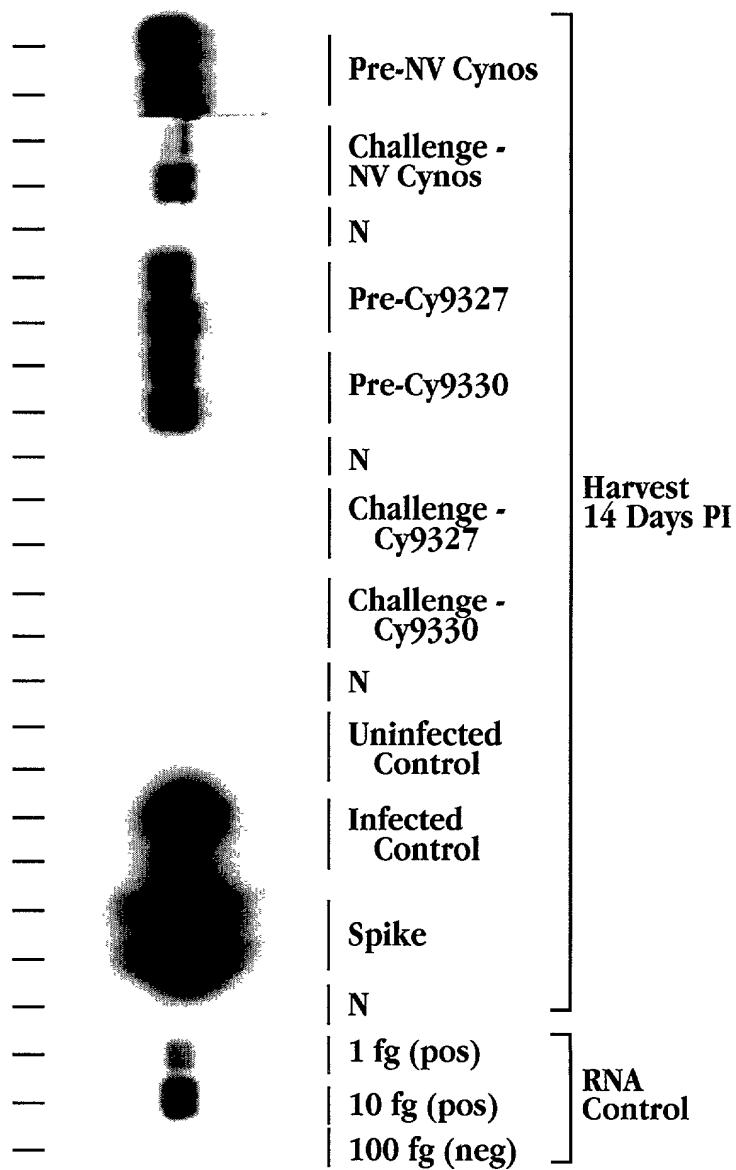
**Fig. 16**



**Fig. 14A**



**Fig. 14B**



**Fig. 15**